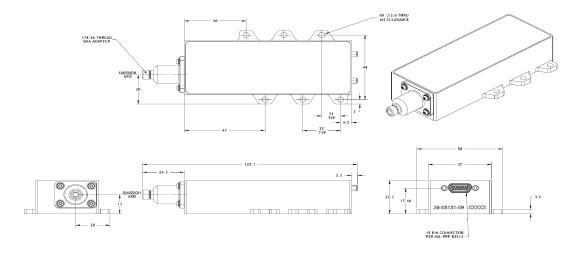


**Model Number** NL-P4-050-1470-10

1470nm 400um Fiber-coupled Module ECCN: 6A005 3 **Item Description** 

|  | Units    | Lower Spec                 | Typical   | Upper Spec |
|--|----------|----------------------------|-----------|------------|
| Optical                                    |          |                            |           |            |
| CW Output Power                            | W        |                            | 50        |            |
| Centroid Wavelength                        | nm       | 1460                       | 1470      | 1480       |
| Spectral Width (FWHM)                      | nm       |                            |           | 10         |
| Slope Efficiency                           | W/A      |                            | 6.4       |            |
| Beam Divergence from Fiber (90% PE)        | NA       |                            | 0.17      | 0.20       |
| Fiber Core / Clad Diameter                 | μm       |                            | 400 / 480 |            |
| Fiber NA / Index Type                      | -        | 0.22 / PowerCore™          |           |            |
| Electrical                                 |          |                            |           |            |
| Electrical-to-Optical Efficiency           | %        | 26                         | 31        |            |
| Threshold Current                          | Α        |                            | 1.6       |            |
| Operating Current                          | A        |                            | 9.4       | 11.8       |
| Operating Voltage                          | V        |                            | 16.9      | 19.1       |
| Series Resistance                          | Ω        |                            | 0.4       |            |
| Mechanical                                 |          |                            |           |            |
| Mass <sup>7</sup>                          | g        |                            | 190       |            |
| Fiber Length                               | m m      | 1.9                        | 2.0       | 2.1        |
| Fiber Bend Radius (Active / Storage)       | mm       |                            | 75 / 65   |            |
| Fiber Jacketing                            | <u>-</u> | Stainless Steel Squarelock |           |            |
| Fiber Termination                          | <u>-</u> | SMA                        |           |            |
| Thermal                                    |          |                            |           |            |
| Thermal Resistance ⁴                       | °C/W     | 0.36                       |           |            |
| Waste Heat                                 | W        | 110                        |           |            |
| Operating Housing Temperature <sup>6</sup> | °C       | İ                          | +25       |            |
| Wavelength Temperature Coefficient ⁵       | nm / °C  |                            | 0.48      |            |
| Outline Drawing                            |          |                            |           |            |

## **Outline Drawing**



## Notes

- <sup>1</sup>Production specifications shown are for beginning of life performance, end of life operating current (lop) is 120% beginning of life lop
- <sup>2</sup>Current phase within nLIGHT's NPI (New Production Introduction) process
- <sup>3</sup>Export Control Classification Number (ECCN) as defined by the Export Administration Regulations (EAR)
- <sup>4</sup>Thermal resistance is the diode junction temperature shift per incremental Watt of heat load
- $^{\rm 5}\text{The}$  wavelength temperature coefficient is the wavelength shift per  $^{\rm \circ}\text{C}$  change at the diode junction
- <sup>6</sup>Operating temperature defined by the package housing. Acceptable operating range is 20 35C, but performance may vary

<sup>7</sup>Does not include mass of fiber

This product is not certified in accordance with IEC 60825-1 or 21CFR1040.10 21CFR1040.11 and is solely intended to be integrated into a laser product certified by the Purchaser. The Purchaser acknowledges that their product (incorporating the nLIGHT laser product) must comply with the applicable regulations before it can be sold.



Notice
nLIGHT continually improves its products to provide customers with outsanding quality and reliability, therefore may change certain specifications and product descriptions at any time, without notice. Additionly, nLIGHT offers a limited warranty to ensure customer satisfaction. For complete details, please contact an nLIGHT sales representative.

RoHS



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